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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,780	03/23/2004	Susumu Okazaki	1111.70127	2380

7590 10/18/2006

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EXAMINER

A, MINH D

ART UNIT	PAPER NUMBER
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2821

DATE MAILED: 10/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/806,780

Applicant(s)

OKAZAKI ET AL.

Examiner

Minh D. A

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's communication filed on 8/03/06 has been carefully considered by the examiner. The arguments advanced therein are persuasive with respect to the rejection of record, and those rejection are accordingly withdrawn. In view of a further consideration, however, a new rejection is set forth below. This action is not made final.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 8-11, 12-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Nishi et al Nishi et al (US 2003/0111666).

Regarding claim 1, figures 16A-17, Nishi discloses the circuit includes a scan bus line control circuit for controlling signals inputted into the plurality of the scan bus lines,

and a data bus line control circuit for controlling signals outputted from the plurality of the data bus lines. See figures 1-6, col.4, lines [0054] to col.11, lines [0156].

Regarding claim 8-9, figures 15A-17, Nishi discloses the first substrate and the second substrate are electrically connected to each other by columnar electrodes formed between the first substrate and the second substrate.

Regarding claim 10, figure 15A-17, Nishi discloses the first substrate and the second substrate are electrically connected to each other by a flexible substrate.

Regarding claim 11, figures 14A-17A, Nishi discloses the light emitted by the light emitting elements is taken out toward the other surface of the first substrate. See figures 1-8A.

Regarding claims 12 and 14, figure 16A-17, Nishi discloses a plurality of light emitting elements on one surface of a first substrate; forming a plurality of switching elements on one surface of a second substrate; bonding said one surface of the first substrate and said one surface of the second substrate to each other and electrically connecting said respective plurality of the light emitting elements to the respective plurality of the switching elements. See figures 1-6, col.4, lines [0054] to col.11, lines [0156].

Regarding claims 13 and 15, figures 16A-17, Nishi discloses one surface of a first substrate a plurality of light emitting elements and a plurality of switching elements electrically connected to said respective plurality of the light emitting elements; forming on one surface of a second substrate a prescribed circuit which is to be electrically connected to said plurality of switching elements; and bonding the first substrate and

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the second substrate to each other with said one surface of the first substrate and said one surface of the second substrate opposed to each other to electrically connect the circuit to the plurality of the switching elements. See figures 1-6, col.4, lines [0054] to col.11, lines [0156].

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-3, 6-7, 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Nishi et al (US 2003/0111666) in view of Miyazawa (US 2004/0079937).

Regarding claims 2 and 3, figure 16A-17, Nishi discloses a display device comprising: a first substrate (1604) having a plurality of light emitting elements on one surface thereof; and a second substrate (1604) having a circuit (1611) for controlling the plurality of the light emitting elements, the second substrate (1610) being bonded to said one surface of the first substrate (1604), and (1605) for sealing a space where the plurality of the light emitting elements are formed. However, Nishi unclearly discloses the circuit (T) including: a plurality of scan bus lines; a plurality of data bus lines intersecting the plurality of the scan bus lines; and a plurality of switching elements arranged respectively at intersections between the plurality of the scan bus lines and

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the plurality of the data bus lines and electrically connected to the respective plurality of the light emitting elements.

Miyazawa discloses on figure 3, that, the circuit (TFT) including: a plurality of scan bus lines (131); a plurality of data bus lines (132) intersecting the plurality of the scan bus lines; and a plurality of switching elements (143) arranged respectively at intersections between the plurality of the scan bus lines and the plurality of the data bus lines and electrically connected to the respective plurality of the light emitting elements. See col.5, lines [0080] to col.6, lines [0085].

It would have been an obvious to one of ordinary skill in the art at the time the invention was made to employ a plurality of data bus lines (132) intersecting the plurality of the scan bus lines; and a plurality of switching elements (143) arranged respectively at intersections between the plurality of the scan bus lines and the plurality of the data bus lines and electrically connected to the respective plurality of the light emitting elements of Miyawa in the display device of Nishi to order to prevent the light emitting device element from quenching due to energy and improve the carrier injection with out using influential material to TFT of alkali metal and alkaline earth metal.

Regarding claims 4-5, Nishi does not disclose wherein a scan bus line control circuit for controlling signals inputted into the plurality of the scan bus lines, and a data bus line control circuit for controlling signals outputted from the plurality of the data bus lines are formed on the first substrate. However, figure 3 of Miyazawa discloses wherein a scan bus line control circuit for controlling signals inputted into the plurality of

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the scan bus lines, and a data bus line control circuit for controlling signals outputted from the plurality of the data bus lines are formed on the first substrate.

Regarding claims 6-7, Nishi discloses the second substrate is a printed circuit board. See figure 17.

Regarding claim 17, Nishi discloses the first substrate and the second substrate are electrically connected to each other by columnar electrodes formed between the first substrate and the second substrate. See figure 17.

Regarding claims 18-19, the first substrate and the second substrate are electrically connected to each other by a flexible substrate. See figure 17.

Citation of relevant prior art

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Isami et al (US 6,791,521) and Yamazaki et al . (US 6,563,482) are cited to show a display device.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dieu A whose telephone number is (571) 272-1817. The examiner can normally be reached on M-F (5:30 AM-2:45 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on (571) 272-1740. The fax phone number for the organization where this application or proceeding is

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assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner

Minh A

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10/12/06

Shih-Chao Chen
SHIH-CHAO CHEN
PRIMARY EXAMINER